

Docket No.: 20046/0200730-US0  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Wolfgang Honlein et al.

Application No.: 10/754,910

Confirmation No.:

Filed: January 9, 2004

Art Unit: N/A

For: MAGNETIC MEMORY UNIT AND  
MAGNETIC MEMORY ARRAY

Examiner: Not Yet Assigned

**INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed within three months of the U.S. filing date (37 CFR 1.97(b)(1)).

A copy of each document on the PTO/SB/08 is attached. Pursuant to the Notice issued by the United States Patent and Trademark Office dated July 11, 2003 waiving the requirements of 37 C.F.R. 1.98(a)(2)(i), a copy of the United States Patents on PTO/SB/08a is not submitted.

Citation CD is not in the English language. In accordance with 1.98(c), Applicant states:

The requirement for concise explanation of relevance of Citation CD is satisfied by the attached translation which describes the basics of the XMR effect (see MPEP § 609 A(3)).


In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed documents.

The Commissioner is authorized to charge any deficiency of up to \$300.00 or credit any excess in this fee to Deposit Account No. 04-0100.

Dated: March 31, 2004

Respectfully submitted,

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Application No. (if known): 10/754,910

Attorney Docket No.: 20046/0200730-USO

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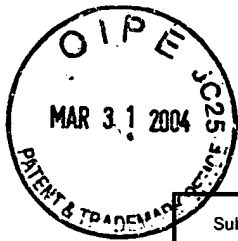
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PTO/SB/08a with 7 documents  
Information Disclosure Statement (2 pages)  
Claim for Priority & Submission of Documents  
Document DE 101 33 373.0  
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|---|---|----|---|--------------------------|-------------------|
| <b>Substitute for form 1449A/B/PTO</b><br><br><b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br>(Use as many sheets as necessary) |   |    |   | <b>Complete if Known</b> |                   |
|   |   |    |   | Application Number       | 10/754,910        |
|   |   |    |   | Filing Date              | January 9, 2004   |
|   |   |    |   | First Named Inventor     | Wolfgang Honlein  |
|   |   |    |   | Art Unit                 | N/A               |
|   |   |    |   | Examiner Name            | Not Yet Assigned  |
| Sheet   | 1 | of | 1 | Attorney Docket Number   | 20046/0200730-USO |

| U.S. PATENT DOCUMENTS |                          |  |                                |  |   |
|-----------------------|--------------------------|--|--------------------------------|--|---|
| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|                       |                          | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                       | AA                       | US-5,640,343-B1                          | 06-17-1997                     | Gallagher et al.                                   |   |

| FOREIGN PATENT DOCUMENTS |                       |   |                  |   |   |                |
|--------------------------|-----------------------|---|------------------|---|---|----------------|
| Examiner Initials*       | Cite No. <sup>1</sup> | Foreign Patent Document   | Publication Date | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T <sup>6</sup> |
|                          |                       | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) | MM-DD-YYYY       |   |   |                |
|                          | BA                    | EP-1 052 520-A1   | 11-15-2000       | Tsukagoshi                                      |   |                |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

| NON PATENT LITERATURE DOCUMENTS |                       |   |  |                |
|---------------------------------|-----------------------|---|--|----------------|
| Examiner Initials               | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |  | T <sup>2</sup> |
|                                 | CA ✓                  | Harris, Peter J.F.; "Carbon Nanotubes and Related Structures - New Materials for the Twenty-first Century"; Cambridge University Press, Cambridge (1999).   |  |                |
|                                 | CB ✓                  | Dekker, C. et al; "Carbon Nanotubes as Molecular Quantum Wires"; Physics Today, May 1999, pages 22-28.  |  |                |
|                                 | CC ✓                  | Tsukagoshi, K. et al; "Coherent transport of electron spin in a ferromagnetically contacted carbon nanotube"; Nature, vol. 401, October 7, 1999, pages 572-574.   |  |                |
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|                                 | CE ✓                  | Prinz, Gary A.;"Magnetoelectronics applications"; Journal of Magnetism and Magnetic Materials 200, 1999, pages 57-68.   |  |                |
|                                 | CF ✓                  | Parkin, S.S.P. et al;"Exchange-biased magnetic tunnel junctions and application to nonvolatile magnetic random access memory (invited)"; Journal of Applied Physics, vol. 85, number 8, April 15, 1999, pages 5828-5833.  |  |                |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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|-----------------------|--|--------------------|--|
| Examiner<br>Signature |  | Date<br>Considered |  |
|-----------------------|--|--------------------|--|